



## **Additional Instructions for “CE” Marked Products – PCR Family**

**OVERVIEW:** The information listed in this document must accompany the Installation Instructions for the OSECO Product Lines approved for the CE symbol. This information will address the possible residual hazards of OSECO’s approved products in accordance with the requirements of the PED and EN ISO 4126-2.

### **PCR Reverse Buckling Rupture Disks in Flat Seat Holder (PRDI/PRDH)**

This product line is not considered a fail-safe rupture disk design. Great care must be exerted to properly install the rupture disk in the holder and install the holder correctly in the piping system. This rupture disk design requires a ratio no greater than 1.5 for the conventional burst pressure (tension) over the reversal pressure. Thus, if a pressure containing system is hydrostatically tested at 1.5 times the maximum allowable working pressure, this disk will not subject the system to a pressure greater than the pressure observed during the hydrostatic testing. Thus, caution must be exercised to achieve a correct installation of this rupture disk design and it’s associated holder. Pins within the holder help to assure proper disk installation within the holder if the holder is unaltered.

Damage to this rupture disk design, i.e., some object impacts the rupture disk dome changing the stress resisting characteristics, will alter the name plate burst pressure rating. Examples of this type of damage are placing the disk dome down on a work surface, resting hand tools on the disk dome dropping the disk on the edge, forcing the dome into the outlet, etc. These examples are listed for illustration only and do not preclude other similar actions during handling of the PCR disk. These actions cause the disk to burst lower than the name plate rating. The PCR rupture disk is a non-fragmenting rupture disk because of the scoring technology and heat treatment utilized in fabricating this rupture disk. This technology combination prevents PCR fabrication in the Tantalum, Titanium and Zirconium materials which are listed in PS 2.6. It is also not available in Hastelloy C276 due to material availability.

Service life for the PCR rupture disk is defined as the number of cycles achieved from atmospheric pressure to ninety (90) percent of the disk rated pressure. This is typically the forming pressure used in the final stage of manufacturing to set the reversal pressure for a lot of rupture disks. PCR rupture disks will cycle approximately 1,000,000 times between the pressure limits illustrated above.